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ning of each regular issue of the PCT Gazette.

(54) Title: WATER-SOLUBLE PACKAGES CONTAINING LIQUID COMPOSITIONS

(57) Abstract: An aqueous liquid composition having a water content of between 20 and 50 wt%, comprising at least one polyphos-
phate builder material, potassium ions and sodium ions, wherein the molar ratio of potassium to sodium is between 0.55:1 and 20:1.

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Claims

1. A package comprising an aqueous liquid detergent composition enclosed by a water-soluble or water dispersible packaging material, said aqueous liquid detergent composition having a water content of between 20 and 50 wt.%, and comprising at least one polyphosphate builder material, potassium and sodium ions, wherein the molar ratio of potassium to sodium is between 0.55:1 and 20:1.
2. A package according to claim 1 wherein the water content is between 30 and 40 wt.%.
3. A package according to claim 1 or 2 wherein the molar ratio of potassium to sodium is between 0.6:1 and 10:1.
4. A package according to claim 3 wherein the molar ratio of potassium to sodium is between 0.65:1 and 5:1.
5. A package according to claim 4 wherein the molar ratio of potassium to sodium is between 0.9:1 and 1.6:1.
6. A package according to any one of the preceding claims wherein the polyphosphate builder material is at least partly in the form of tripolyphosphate.
7. A package according to claim 6 wherein the polyphosphate builder material is at least partly

potassium tripolyphosphate.

8. A package to any one of the preceding claims wherein the sodium ions are provided at least partly by a co-builder material.
9. A package according to claim 8 wherein the co-builder material is of the oligocarboxylate or polycarboxylate type.
10. A package according to claim 9 wherein the oligocarboxylate or polycarboxylate type co-builder material is selected from the group consisting of sodium citrate, sodium polyacrylate and its copolymers, sodium gluconate and mixtures thereof.
11. A package according to any of the preceding claims wherein the composition in its uncoloured form is a translucent or transparent liquid or gel showing a transmission ratio of more than 30 %, preferably more than 40 %, most preferably more than 50 %, measured in accordance with the ELVORS transmission method.
12. A package according to any one of the preceding claims wherein the packaging material, is a water-soluble or water-dispersible film material.
13. A package according to claim 12 wherein the film material is selected from the group consisting of poly(vinylalcohol) based homopolymers or copolymers, or graft polymers polyethylene oxide and cellulose

derivatives.

14. A package according to any one of the preceding
claims 1 - 11 wherein the packaging material's
5 injection moulded poly(vinylalcohol) or a cellulose
15. A package according to anyone of the preceding
claims wherein the aqueous composition is a
dishwashing, rinse-aid, water-softening or laundry
10 washing composition.
16. A package according to claim 15 which is suitable
for use in a domestic dishwashing or laundry
machine.
- 15
17. A process for preparing an aqueous liquid
composition with a water content of between 20 and
50 wt.%, comprising at least one polyphosphate
builder material and at least one source of
20 potassium ions and one at least one source of sodium
ions, wherein the molar ratio of potassium to sodium
is between 0.55:1 and 20:1 wherein, in a first step,
at least a major part of the source of sodium ions
is dissolved in water, and, in a second step, the
25 polyphosphate builder material is dissolved in the
resulting aqueous solution.
18. A process according to claim 12 wherein essentially
all of the source of sodium ions is dissolved in
30 water in the first step.

19. A process according to claim 17 or 18 wherein the source of sodium ions is sodium citrate and the polyphosphate builder is potassium tripolyphosphate.
- 5 20. A process according to any one of claim 17 to 19 which further comprises packaging the aqueous liquid composition in a water-soluble or water dispersible packaging material.